

**RESPONSE TO NON-FINAL OFFICE ACTION**

Serial No. 10/635,819

Title: METHODS AND APPARATUS UTILIZING EMBEDDED DATA LAYERS

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Attorney Docket No. 200206815-1

**IN THE SPECIFICATION****RECEIVED  
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Please replace Paragraph [0017] of the Specification with the following amended paragraph:

[0017] As stated above, steganography and watermarking are methods of encoding information into the pixels of images in manners that are robust and have a high resulting image quality. Prior art watermarking typically encodes only a small amount of data in a single layer of watermark encoding at a low coding rate in an image to preserve the image quality and robustness of the encoded data (the ability to retrieve the encoded data). This watermark is also generally encoded in the image as a whole. In addition, the use of watermarking in images and, in particular, printed material has suffered from issues of reliability in that they may be easily damaged and rendered unreadable. Newer systems of watermarking allow for high coding levels and increased robustness, while maintaining a high level of image quality. As described in the U.S. Patent Application No. 10/623,878 (HP Patent Application Ref. No. 200206812-1), titled "Embedded Data Layers", which is commonly assigned, this allows for the encoding of multiple layers of data/data fields into a given image or into objects within a given image utilizing multiple watermarking methods that utilize differing transforms and/or encoding methods or within a single watermark when the watermark allows for a high coding level. This watermarking of multiple data levels, enabling storage of two or more data levels in a given image or image object in a printed page, allows for image information/associated information/metadata to be embedded and permanently associated with the image. Watermarking of image objects allows multiple levels of metadata to be provided for multiple arbitrary objects in a page and not just the entire page, allowing the information to be relevant to the scanned object and readily available for reference.